

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
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(530)757-3650

PROPOSED TITLE V PERMIT RENEWAL
STATEMENT OF BASIS

PERMIT NUMBER: F-00470-8

ENGINEER: René Toledo

DATE: April 27, 2010

Facility Name: Agrium U.S., Inc.
Mailing Address: 3961 Channel Drive
West Sacramento, CA 95691

Location: 3961 Channel Drive
West Sacramento, CA 95691

Responsible Official: Bobby E. Franklin
Title: Plant Manager

Application Contact: John Killey, Environmental Specialist

Phone: (916) 375-6160

I. FACILITY DESCRIPTION

This facility manufactures and distributes nitrogen based fertilizers. The facility primarily receives bulk shipments of granular or prilled urea and anhydrous ammonia by barge or ship via the Sacramento River Deep Water Channel. Urea receiving operations are being expanded to include receiving of bulk urea by railcar. The bulk urea received will be primarily stored in the 32,000 ton capacity warehouse, while the anhydrous ammonia is stored in two atmospheric storage tanks and one pressure vessel.

Stored bulk urea can be screened and shipped out by truck or railcar, or transferred to other parts of the facility for use in the production of UAN-32 (urea and ammonia nitrate) solution. The produced nitric acid is then used to manufacture an ammonium nitrate solution. Specifically, the combination of bulk urea with this ammonium nitrate solution produces urea ammonium nitrate (UAN-32). Any anhydrous ammonia not used in the UAN-32 production process is shipped off site in tanker trucks.

II. PROPOSED REVISIONS

The source has submitted an approved Yolo-Solano Air Quality Management District (District) application requesting the renewal of their current Title V operating permit (F-00470-6 issued July 31, 2008).

Subsequent to the issuance of F-00470-6, the source applied for and received Authority to Construct (ATCs) C-08-114 for receiving of bulk urea by railcar and C-08-225 for modifications to the shipping & transfer of bulk urea. The District processed these ATCs using the provisions of enhanced New Source Review (NSR) and therefore the District published a proposed permit revision F-00470-7. Although the facility completed the work and the ATCs were implemented into Permits to Operate (PTOs) P-33-09 and P-72-78(a7), the final permit F-00470-7 was never issued. These changes will be incorporated now, at the time of renewal.

Subsequent to the notice of F-00470-7, the source applied for and received ATC C-10-14 to modify the existing equipment of P-33-09 to allow for the transfer of granular urea received from railcars and/or off-loaded from overfilled trucks, into the existing urea warehouse. The equipment of P-33-09 currently only allows the material to be received and transferred to the UAN-32 production process. The source requested that the District not process this ATC using the provisions of enhanced New Source Review (NSR), and therefore can build the equipment, but not operate it until the District approves a revised Title V permit. The source has now applied for the District to incorporate the requirements of this ATC into this Title V renewal permit. The District is therefore proposing this renewal permit (F-00470-8) which includes the provisions of ATC C-10-14. The District will require that the facility construct the new equipment and implement the ATC into a PTO prior to final issuance of F-00470-8.

III. INSIGNIFICANT EMISSIONS UNIT INFORMATION

Insignificant emissions units or exempted equipment may be supplemented, replaced or modified with non-identical equipment without notice provided that the exemption status of a unit has not changed as defined in current District or Federal rules. The equipment listed in Table 1 is a complete listing of the equipment currently identified as exempt or insignificant and not required to obtain an operating permit pursuant to District Rule 3.2 (Exemptions).

Table 1 - Exempted and Insignificant Emissions Units

Equipment Description	Basis for Exemption
Heating, Ventilation, and Air Conditioning Systems	District Rule 3.2, Section 103
Portable Welding and Generator Engines Rated 50 BHP or Less	District Rule 3.2, Section 105.1
Equipment Repairs and Maintenance	District Rule 3.2, Section 108
Propane Storage Tank (1,000 gallon)	District Rule 3.2, Section 109.1
Diesel Aboveground Storage Tank (10,500 gallons)	District Rule 3.2, Section 109.2
Solvent Parts Washer (35 gallons)	District Rule 3.2, Section 110.3
Laboratory Equipment	District Rule 3.2, Section 111
Cooling Tower	District Rule 3.2, Section 112
Aqueous Urea Solution Mixing and Storage	District Rule 3.2, Section 113

IV. SIGNIFICANT EMISSIONS UNIT INFORMATION

Each of the existing sources has been constructed pursuant to issuance of an ATC in accordance with District Rules 3.1 (General Permit Requirements) and 3.4 (New Source Review).

Identification Number: **P-33-09(a)**, Receiving of Bulk Urea by Railcar and Truck

Equipment Description: One (1) 5 HP truck drive-over belt feeder (P-612); one (1) 25 HP unloading bucket elevator (P-613); and one (1) gravity fed warehouse transfer chute (P-TBD). Process equipment shared and billed on PTO P-72-78¹: Portable conveyor (P-620); transfer belt conveyor (P-603); screw conveyor (P-604); day tank

¹ To promote operational flexibility and streamline future modifications, the District has chosen to not list the specific permit suffix in the process and control equipment descriptions of PTOs P-33-09 and P-72-78.

(P-605); bin activator (P-606); weigh feeder (P-607); and transfer belt conveyor (P-608).

Control Equipment: Railcar receiving dust pan served by the AFF scrubber. Control equipment shared with PTO P-72-78: AAF wet scrubber (GB-501), Model Type W Rotoclone, Size 30 and rated at 15,710 CFM (located adjacent to the screening tower); Torit baghouse (P-618) with a 1.5 HP fan rated at 1,000 CFM (located on top of day tank); Sly Impinjet wet scrubber (F-644), Model No. 120, with a 75 HP fan rated at 1,500 CFM (located on top of blender tank).

Identification Number: **P-36-82(a)**, Natural Gas Fired Boiler

Equipment Description: One (1) 37.5 MMBtu/hr natural gas fired Hercules boiler, Model No. 900, Serial No. 1955-82/SN1144 (B-601)

Control Equipment: Flue gas recirculation (FGR) system, variable frequency driver, air/fuel ratio controller

Identification Number: **P-37-82(a2)**, Nitric Acid Production

Equipment Description: One (1) 3700 HP Air compressor; one (1) 5 HP stripper feed pump; one (1) 10 HP condensate feed pump; one (1) 10 HP ammonia feed; one (1) 15 HP acid feed pump; and one (1) 20 HP raw water pump

Control Equipment: NO_x Decomposer

Identification Number: **P-70-78(a1)**, Bulk Ammonia Warehousing and Transfer

Equipment Description: Two (2) 7,500,000 gallon bulk ammonia storage tanks (F-250A & F-250B); one (1) 45,000 gallon bullet tank (F-350); four (4) tanker truck loadout racks; one (1) railcar tanker loadout rack; and all associated process lines, compressors, heaters, condensers, and refrigeration units

Control Equipment: One (1) Zeeco flare, Model No. UF-12W (Two Pilots: 0.50 MMBtu/hr (combined) firing on natural gas, or

0.602 MMBtu/hr (combined) firing on propane), and associated header; two (2) Worthington two-stage compressor trains (Train A: 1st Stage GC-250A, 2nd Stage GC-251A; Train B: 1st Stage GC-250B, 2nd Stage GC-251B); one (1) vent condenser (E-251); one (1) vapor return header connected to the loading racks and small relief valves; one (1) Frick ammonia refrigeration condenser, Model HCU-180A (E-250A); one (1) Baltimore Aircoil Co. ammonia refrigeration condenser, Model CXV-264/PR (E-250B); and one(1) ammonia accumulator (F-251)

Identification Number: P-71-78(a), Ammonia Product Heater (Backup)

Equipment Description: One (1) 24 MMBtu/hr Smalling Engineering & Equipment Ammonia Heater (B-350)

Control Equipment: None

Identification Number: P-72-78(a7), Shipping and Transfer of Bulk Urea

Equipment Description: Shipping equipment: reclaim belt conveyor (P-552); drag chain conveyor (P-553); reclaim bucket elevator (P-554); loading bucket elevator (P-555); west rotex screen (P-559); east rotex screen (P-560); 30 ton truck loading hopper (P-562); seven (7) reclaim hoppers (P-564); one (1) warehouse return conveyor (P-556), one (1) portable conveyor (P-620), and misc. bin(s). Transfer Equipment (partially shared with PTO P-33-09²): transfer screw conveyor (P-602); transfer belt conveyor (P-603); screw conveyor (P-604); day tank (P-605); bin activator (P-606); weigh feeder (P-607); and transfer belt conveyor (P-608). Total equipment electric horsepower not to exceed 199 HP.

Control Equipment: Serving the urea transfer and shipping equipment (partially shared with PTO P-33-09): AAF wet scrubber (GB-501), Model Type W Rotoclone, Size

² To promote operational flexibility and streamline future modifications, the District has chosen to not list the specific permit suffix in the process and control equipment descriptions of PTOs P-33-09 and P-72-78.

30 and rated at 15,710 CFM (located adjacent to the screening tower); Sly truck loading spout (P-562), Model No. XP-8; and Sly railcar loading spout (SP-601), Model No. XP-12. Serving the UAN-32 transfer equipment (shared with PTO P-33-09): Torit baghouse (P-618) with a 1.5 HP fan rated at 1,000 CFM (located on top of day tank); and Sly Impinjet wet scrubber (F-644), Model No. 120, with a 75 HP fan rated at 1,500 CFM (located on top of blender tank)

Identification Number: **P-73-78(a3)**, Receiving of Bulk Urea

Equipment Description: One (1) 75 HP unloading conveyor belt (P-550); one (1) 10 ton receiving hopper; one (1) 15 HP distributing belt conveyor (P-551); and one (1) 5 HP carriage drive (P-551A)

Control Equipment: Torit baghouse (P-558), with a 3 HP fan rated at 1,000 CFM, serving the urea warehousing and distribution (located on top of urea warehouse); and Torit baghouse (P-593), with a 25 HP fan rated at 12,000 CFM, serving the urea unloading equipment during barge off loading (located at dock)

Identification Number: **P-85-94(t)**, Internal Combustion (IC) Engine Powering an Emergency Generator

Equipment Description: 600 BHP diesel fired Detroit Diesel IC engine, Model No. 7123-7305, Serial No. 12VA049059, Model Year 1978, Non-EPA Certified Engine

Control Equipment: Turbocharger

V. TITLE V APPLICABILITY

The source has submitted an application for a Title V permit renewal. The stationary source is subject to the requirements of District Rule 3.8 (Federal Operating Permits) since the facility's potential to emit (PTE) exceeds the major source thresholds for carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions (100 tons per year and 25 tons per year, respectively). The facility's emission totals are listed below in Table 2:

Table 2 - Total Facility Emissions

Criteria Pollutant Emissions (tons per year)					
Emission Unit Name	VOC	CO	NO_x	SO_x	PM₁₀
P-33-09(a)	-	-	-	-	2.42
P-36-82(a)	0.06	6.47	0.80	0.01	0.30
P-37-82(a2)	-	168.00	42.00	-	0.00
P-70-78(a1)	0.01	0.04	14.39	0.03	0.30
P-71-78(a)	0.02	0.25	0.30	Neg.	0.02
P-72-78(a7)	-	-	-	-	2.72
P-73-78(a3)	-	-	-	-	2.62
P-85-94(t)	0.12	0.27	1.25	0.02	0.09
Total	0.21	175.03	58.74	0.06	8.47

VI. APPLICABLE FEDERAL REQUIREMENTS

RULE 2.3 Ringelmann Chart

Rule Description

This rule specifies the allowable opacity limit for all sources operating in the District.

Compliance Status

The rule applies to any visible emissions associated with the stationary source. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California State Implementation Plan (SIP). The source is currently in compliance with the requirements of the rule.

Streamlining Demonstration

The requirements of the rule can be streamlined by conditions required by District Rule 3.4 (New Source Review). The streamlining demonstration is shown below:

Streamlined Requirement: "The Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant

for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the United States Bureau of Mines; or
- b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection a. of this condition."

The District Rule 3.4 opacity limits for the equipment of P-33-09(a) are :

The Permit Holder shall not discharge into the atmosphere from the baghouse exhaust, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart; or
- b. Greater than 5% opacity. [District Rule 3.4/C-10-14]

The Permit Holder shall not discharge into the atmosphere from either of the scrubbers exhausts, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.4/C-10-14]

The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.4/C-10-14]

Therefore, the Rule 2.3 requirements are streamlined by the District Rule 3.4 requirements of P-33-09(a).

The District Rule 3.4 opacity limit for the equipment of P-37-87(a2) is:

Process emissions shall not exceed 10% opacity. [40 CFR Part 60, Section 60.72(a)(2) (Subpart G)/C-03-68]

Therefore, the Rule 2.3 requirements are streamlined by the District Rule 3.4 requirements of P-37-87(a2).

The District Rule 3.4 opacity limits for the equipment of P-72-78(a7) are:

The Permit Holder shall not discharge into the atmosphere from the baghouse exhaust, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart;
or
- b. Greater than 5% opacity. [District Rule 3.4/C-08-225]

The Permit Holder shall not discharge into the atmosphere from either of the scrubbers exhausts, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.4/C-08-225]

Therefore, the Rule 2.3 requirements are streamlined by the District Rule 3.4 requirements of P-72-78(a7).

The District Rule 3.4 opacity limits for the equipment of P-73-78(a3) are:

While unloading barges (defined as transferring material to dock side via conveyor and chute) the Permit Holder shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/2 on the Ringelmann Chart;
or
- b. Greater than 10% opacity. [District Rule 3.4/C-07-224]

The Permit Holder shall not discharge into the atmosphere, from any baghouse, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart;
or
- b. Greater than 5% opacity. [District Rule 3.4/C-07-224]

Therefore, the Rule 2.3 requirements are streamlined by the District Rule 3.4 requirements of P-73-78(a3).

Permit Conditions

Opacity Requirements for P-36-82(a) - Boiler

No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as

dark as, or darker than, Ringelmann 2 or 40% opacity. [District Rule 2.3/C-00-107]

Opacity Requirements for P-70-78(a1) - Bulk Ammonia Warehousing and Transfer

The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 2 on the Ringelmann Chart; or
- b. Greater than 40% opacity. [District Rule 2.3/C-06-181]

Opacity Requirements for P-71-78(a) - Ammonia Backup Heater

The operation shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 2 on the Ringelmann Chart; or
- b. Greater than 40% opacity. [District Rule 2.3/C-01-169]

Opacity Requirements for P-72-78(a7) - Urea Shipping and Transfer

The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 2 on the Ringelmann Chart; or
- b. Greater than 40% opacity. [District Rule 2.3/C-08-225]

Opacity Requirements for P-73-78(a3) - Urea Receiving by Ship and Barge

While unloading ships (defined as transferring material to dock side hopper via "clam shell"), the Permit Holder shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 2 on the Ringelmann Chart; or
- b. Greater than 40% opacity. [District Rule 2.3/C-07-224]

Opacity Requirement for P-85-94(t) - Emergency Diesel fired IC Engine

The Permit Holder shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 2 on the Ringelmann Chart; or

- b. Greater than 40% opacity. [District Rule 2.3/P-85-94]

RULE 2.5 Nuisance

Rule Description

This rule requires that sources are not a public nuisance.

Compliance Status

The rule applies to all emission units at the stationary source. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP. The source is currently in compliance with the requirements of the rule.

Permit Condition

The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property.

The following permit condition is federally enforceable because it derives from District Rule 2.5 (Nuisance) that is currently part of the California State Implementation Plan (SIP). The District is taking steps to remove District Rule 2.5 from the SIP. Once the U.S. Environmental Protection Agency (EPA) has taken final action to remove District Rule 2.5 from the SIP, this permit condition will become state-enforceable only.

RULE 2.11 Particulate Matter

Rule Description

This rule specifies the allowable particulate matter emission rates at standard conditions. For purpose of this evaluation, the particulate matter (PM) emissions are considered to be 100% PM₁₀ (PM with an aerodynamic diameter of 10 microns or less).

Compliance Status

The rule applies to all of the fuel combustion emission units (i.e. the natural gas fired boiler, the ammonia fired flare, the natural gas fired backup heater, and the diesel fired emergency IC engine) and all dust collection units operating at the facility. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP. The source is currently in compliance with the requirements of the rule.

Streamlining Demonstration

The requirements of the rule can be streamlined by conditions required by District Rule 3.4 (New Source Review). The streamlining demonstration is shown below:

Streamlined Requirement: "The Permit Holder shall not release or discharge into the atmosphere from any source, particulate matter in excess of 0.3 grains per dry standard cubic foot (gr/DSCF) of exhaust volume as calculated to standard conditions."

The District Rule 3.4 PM₁₀ emission limits for the individual dust collectors operating under the provisions of P-33-09(a) are:

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-618, particulate matter in excess of 0.004 grains per cubic feet of exhaust. [District Rule 3.4/C-10-14]

The Permit Holder shall not release or discharge into the atmosphere from scrubber F-644, particulate matter in excess of 0.004 grains per cubic feet of exhaust. [District Rule 3.4/C-10-14]

The Permit Holder shall not release or discharge into the atmosphere from scrubber GB-501 when receiving urea from railcars or overfilled trucks, particulate matter in excess of 0.0015 grains per cubic feet of exhaust. [District Rule 3.4/C-10-14]

Therefore, the Rule 2.11 requirements are streamlined by the District Rule 3.4 requirements of P-33-09(a).

The District Rule 3.4 PM₁₀ emission limit for the natural gas fired boiler operating under P-36-82(a) is 9.9 pounds per day (lb/day). The corresponding emission concentration is calculated below using the boiler's maximum firing rate of 37.5

million British Thermal Unit per hour (MMBTU/hr) and a natural gas F-Factor of 8,710 DSCF/MMBTU (at 68° F).

$$= (9.9 \text{ lb/day}) * (7,000 \text{ gr/lb}) * (1 \text{ day/24 hours}) * (1 \text{ hour/37.5 MMBTU}) \\ * (1 \text{ MMBTU/8,710 DSCF}) = 0.009 \text{ gr/DSCF}$$

Therefore, the Rule 2.3 requirements are streamlined by the District Rule 3.4 requirements of P-36-82(a).

The District Rule 3.4 PM₁₀ emission limit of the ammonia fired flare operating under P-70-78(a1) is 28.2 lb/day. The corresponding emission concentration is calculated below using the flare's maximum firing rate of 58.062 MMBTU/hr (while firing on ammonia) and an ammonia F-Factor of 8,970 DSCF/MMBTU.

$$= (28.2 \text{ lb/day}) * (7,000 \text{ gr/lb}) * (1 \text{ day/24 hours}) * (1 \text{ hour/58.062 MMBtu}) \\ * (1 \text{ MMBTU/8,970 DSCF}) = 0.016 \text{ gr/DSCF}$$

Therefore, the Rule 2.11 requirements are streamlined by the District Rule 3.4 requirements of P-70-78(a1).

The District Rule 3.4 PM₁₀ emission limit of the natural gas fired ammonia backup heater operating under P-71-78(a) is 4.4 lb/day. The corresponding emission concentration is calculated below using the heater's maximum firing rate of 24.0 MMBtu/hr (while firing on ammonia) and an ammonia F-Factor of 8,710 DSCF/MMBTU.

$$= (4.4 \text{ lb/day}) * (7,000 \text{ gr/lb}) * (1 \text{ day/24 hours}) * (1 \text{ hour/24.0 MMBtu}) * \\ (1 \text{ MMBTU/8,710 DSCF}) = 0.006 \text{ gr/DSCF of PM}$$

Therefore, the Rule 2.11 requirements are streamlined by the District Rule 3.4 requirements of P-71-78(a).

The District Rule 3.4 PM₁₀ emission limits for the individual dust collectors operating under the provisions of P-72-78(a7) are:

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-618, particulate matter in excess of 0.001 grains per cubic feet of exhaust. [District Rule 3.4/C-08-225]

The Permit Holder shall not release or discharge into the atmosphere from scrubber F-644, particulate matter in excess of 0.001 grains per cubic feet of exhaust. [District Rule 3.4/C-08-225]

The Permit Holder shall not release or discharge into the atmosphere from scrubber GB-501 when transferring urea to the UAN-32 production process from the warehouse, particulate matter in excess of 0.012 grains per cubic feet of exhaust. [District Rule 3.4/C-08-225]

Therefore, the Rule 2.11 requirements are streamlined by the District Rule 3.4 requirements of P-72-78(a7).

The District Rule 3.4 PM_{10} emission limits for the individual dust collectors operating under the provisions of P-73-78(a3) are:

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-558, particulate matter in excess of 0.070 grains per cubic feet of exhaust. [District Rule 3.4/C-07-224]

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-593, particulate matter in excess of 0.006 grains per cubic feet of exhaust. [District Rule 3.4/C-07-224]

Therefore, the Rule 2.11 requirements are streamlined by the District Rule 3.4 requirements of P-73-78(a3).

The District Rule 3.4 PM_{10} emission limit of the emergency diesel fired IC engine operating under P-85-94(t) is 20.6 lb/day. The corresponding emission concentration is calculated below using a maximum operating schedule of 24 hours, maximum engine fuel consumption rate of 26.7 gallons per hour, diesel fuel density of 7.1 pounds per gallon, diesel fuel higher heating value of 19,300 BTU/lb, and a diesel fuel F-Factor of 9,220 DSCF/MMBTU.

$$\begin{aligned} &= (0.4 \text{ lb/day}) * (7,000 \text{ gr/lb}) * (1 \text{ day/24 hours}) * (1 \text{ hour/26.7 gallons}) \\ &* (1 \text{ gallon/7.1 lb}) * (1 \text{ lb/19,300 BTU}) * (10^6 \text{ BTU/1 MMBTU}) \\ &* (1 \text{ MMBTU/9,220 DSCF}) = 0.003 \text{ gr/DSCF of PM} \end{aligned}$$

Therefore, the Rule 2.11 requirements are streamlined by the District Rule 3.4 requirements of P-85-94(t).

RULE 2.12 Specific Contaminants

Rule Description

This rule specifies the allowable sulfur dioxide (SO₂) and PM emission rates at standard conditions. For the purposes of this evaluation, the sulfur oxide (SO_x) emissions are considered to be 100% SO₂.

Compliance Status

The rule applies to all of the fuel combustion emission units (i.e. the natural gas fired boiler, the ammonia fired flare, the natural gas fired backup heater, and the diesel fired emergency IC engine). The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP. The source is currently in compliance with the requirements of the rule.

Streamlining Demonstration

The requirements of the rule can be streamlined by conditions required by District Rule 3.4. The streamlining demonstrations for PM₁₀ were shown in the previous rule and for SO₂ are shown below:

Streamlined Requirement: "The Permit Holder shall not release or discharge into the atmosphere from any single source of SO₂ in excess of 0.2 percent by volume as calculated to standard conditions."

The District Rule 3.4 SO_x emission limit for the natural gas fired boiler operating under P-36-82(a) is 0.4 lb/day. The corresponding emission concentration is calculated below using the boiler's maximum firing rate of 37.5 MMBTU/hr, a maximum operating schedule of 24 hours per day, standard exhaust molar volume of 385 DSCF/MMBTU, and the natural gas F-Factor.

$$\begin{aligned} &= (0.4 \text{ lb/day}) * (1 \text{ day/24 hour}) * (1 \text{ hour/37.5 MMBTU}) * (1 \text{ lb-mole/} \\ &64 \text{ lb}) * (385 \text{ DSCF/1 lb-mole}) * (1 \text{ MMBTU/8,710 DSCF}) * 100\% \\ &= 0.00003\% \text{ SO}_x \end{aligned}$$

Therefore, the Rule 2.12 requirements are streamlined by the District Rule 3.4 requirements of P-36-82(a).

The District Rule 3.4 SO_x emission limit for the ammonia fire flare operating under P-70-78(a1) is 0.2 lb/day. The corresponding emission concentration is

calculated below using the flare's pilot burner rating of 0.602 MMBTU/hr (while firing on propane) and a propane F-Factor of 8,710 DSCF/MMBTU.

$$= (0.2 \text{ lb/day}) * (1 \text{ day/24 hour}) * (1 \text{ hour/0.602 MMBTU}) * (1 \text{ lb-mole/64 lb}) * (385 \text{ DSCF/lb-mole}) * (1 \text{ MMBTU/8,710 DSCF}) * 100\% = 0.001\% \text{ SO}_x$$

Therefore, the Rule 2.12 requirements are streamlined by the District Rule 3.4 requirements of P-70-78(a1).

The District Rule 3.4 SO_x emission limit for the natural gas fired ammonia backup heater operating under P-71-78(a) is 0.3 lb/day. The corresponding emission concentration is calculated below using the boiler's maximum rating of 24.0 MMBTU/hr and a natural gas F-Factor of 8,710 DSCF/MMBTU.

$$= (0.3 \text{ lb/day}) * (1 \text{ day/24 hour}) * (1 \text{ hour/24.0 MMBTU}) * (1 \text{ lb-mole/64 lb}) * (385 \text{ DSCF/lb-mole}) * (1 \text{ MMBTU/8,710 DSCF}) * 100\% = 0.00004\% \text{ SO}_x$$

Therefore, the Rule 2.12 requirements are streamlined by the District Rule 3.4 requirements of P-71-78(a).

The District Rule 3.4 SO_x emission limit for the emergency diesel fired IC engine operating under P-85-94(t) is 4.5 lb/day. The corresponding emission concentration is calculated below using a maximum operating schedule of 24 hours, maximum engine fuel consumption rate of 26.7 gallons per hour, diesel fuel density of 7.1 pounds per gallon, diesel fuel higher heating value of 19,300 BTU/lb, and a diesel fuel F-Factor of 9,220 DSCF/MMBTU.

$$= (4.5 \text{ lb/day}) * (1 \text{ day/24 hours}) * (1 \text{ hour/26.7 gallon}) * (1 \text{ gallon/7.1 lb}) * (1 \text{ lb/19,300 BTU}) * (10^6 \text{ BTU/1 MMBTU}) * (1 \text{ lb-mole/64 lb}) * (385 \text{ DSCF/lb-mole}) * (1 \text{ MMBTU/9,220 DSCF}) * 100\% = 0.003\% \text{ SO}_x$$

Therefore, the Rule 2.12 requirements are streamlined by the District Rule 3.4 requirements of P-85-94(t).

RULE 2.16 Fuel Burning Heat or Power Generators

Rule Description

This rule specifies the allowable SO₂, nitrogen dioxide (NO₂), and combustion PM limits for non-mobile, fuel burning, heat or power generating units. For the

purposes of this evaluation, the nitrogen oxide (NO_x) emissions are considered to be 100% NO₂.

Compliance Status

The rule applies to all of the fuel combustion emission units (i.e. the natural gas fired boiler, the ammonia fired flare, the natural gas fired backup heater, and the diesel fired emergency IC engine). The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP. The source is currently in compliance with the requirements of the rule.

Streamlining Demonstration

The requirements of the rule can be streamlined by conditions required by District Rule 3.4. The streamlining demonstrations for the condition are shown below:

Streamlined Requirement: "The Permit Holder shall not build, expand, or operate any non-mobile fuel burning equipment for a heat or power generator unit unless the discharge into the atmosphere of contaminants will not and does not exceed any one or more of the following rates:

- a. 200 pounds per hour of sulfur compounds, calculated as SO₂;
- b. 140 pounds per hour of NO_x, calculated as NO₂; and
- c. 40 pounds per hour of combustion particulate derived from the fuel."

The District Rule 3.4 daily SO_x, NO_x, and PM emission limits of the natural gas fired boiler operating under P-36-82(a) are 0.4 lbs, 26.2 lbs, and 9.9 lbs, respectively. Therefore, since all three daily pollutant specific emission limits are below the respective hourly limits of District Rule 2.16, the rule requirements are streamlined by the District Rule 3.4 requirements of P-36-82(a).

The District Rule 3.4 daily SO_x, NO_x, PM emission limits of the nitric acid production plant operating under P-37-82(a2) are 0.0 lbs, 250 lbs, 0.0 lbs, respectively. Of the three emission limits, only the daily NO_x emission limit is above its respective hourly District Rule 2.16 pollutant emission limit. As such, the hourly NO_x emission limit has been calculated using the unit's maximum daily operational schedule of 24 hours.

$$= (250 \text{ lbs of NO}_x/\text{day}) * (1 \text{ day}/24 \text{ hour}) = 10.4 \text{ lbs of NO}_x/\text{hour}$$

Therefore, the Rule 2.16 requirements are streamlined by the District Rule 3.4 requirements of P-37-82(a2).

The District Rule 3.4 daily SO_x, NO_x, and PM emission limits of the ammonia fired flare operating under P-70-78(a1) are 0.2 lbs, 1,397.4 lbs, and 28.2 lbs, respectively. Of the three emission limits, only the daily NO_x emission limit is above its respective District Rule 2.16 pollutant emission limit. As such, the hourly NO_x emission limit has been calculated using the unit's maximum daily operational schedule of 24 hours.

$$= (1,397.4 \text{ lbs of NO}_x/\text{day}) * (1 \text{ day}/24 \text{ hours}) = 58.2 \text{ lbs of NO}_x/\text{hour}$$

Therefore, the Rule 2.16 requirements are streamlined by the District Rule 3.4 requirements of P-70-78(a1).

The District Rule 3.4 daily SO_x, NO_x, and PM emission limits of the natural gas fired ammonia backup heater operating under P-71-78(a) are 0.3 lbs, 57.6 lbs, and 4.4 lbs, respectively. Therefore, since all three daily pollutant specific emission limits are below the respective hourly limits of District Rule 2.16, the rule requirements are streamlined by the District Rule 3.4 requirements of P-71-78(a).

The District Rule 3.4 daily SO_x, NO_x, and PM emission limits of the emergency diesel fired IC engine operating under P-85-94(t) are 4.5 lb, 300.5 lbs, and 20.6 lbs, respectively. Of the three emission limits, only the daily NO_x emission limit is above its respective hourly District Rule 2.16 pollutant emission limit. As such, the hourly NO_x emission limit has been calculated using the unit's maximum daily operational schedule of 24 hours.

$$= (300.5 \text{ lbs of NO}_x/\text{day}) * (1 \text{ day}/24 \text{ hours}) = 12.5 \text{ lbs of NO}_x/\text{hour}$$

Therefore, the Rule 2.16 requirements are streamlined by the District Rule 3.4 requirements of P-85-94(t).

RULE 2.17 Circumvention

Rule Description

This rule prevents sources from concealing emissions to the atmosphere.

Compliance Status

The rule is applicable to all emission units at the facility. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP.

Permit Condition

The Permit Holder shall not build, erect, install or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26, Part 3 and Part 4 of the Health and Safety Code of the State of California or District Rules or Regulations. [District Rule 2.17]

RULE 2.19 Particulate Matter Process Emission Rate

Rule Description

This rule limits the pound per hour PM emission rate based on the amount of material processed.

Compliance Status

The rule applies to the receiving, transfer, and shipping operations of granular urea at the facility. Since District Rule 1.1, Section 229 (previously Rule 1.2.y.), defines "process weight per hour" as "the total weight of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not." Therefore, the compliance of PM emission produced directly from the combustion of gaseous and liquid fuels (i.e. natural gas, propane, ammonia, or diesel fuel) will not be evaluated. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the California SIP.

Streamlining Demonstration

The requirements of the rule can be streamlined by conditions required by District Rule 3.4. The streamlining demonstrations for the condition are shown below:

Streamlined Requirement: "No person shall discharge in any one hour from any process unit except for motor vehicles, implements of husbandry, and certain

agricultural facilities... particulate matter of a weight in excess of the amount shown for the corresponding process weight per hour in the following table.”

The District Rule 3.4 PM emission limit for the railcar and truck urea receiving operation of P-33-09(a) is 20.1 lbs of urea (or 0.84 lbs/hour). The total combined daily throughput limit for this permit is 1,204 tons (or 100,333 lbs/hour). The maximum allowable PM emission rate for an operation with an hourly process rate greater than 58,300 lbs is 40 lbs of PM. Since the hourly permitted PM limit of P-33-09(a) is more stringent than the Rule 2.19 requirement, the rule requirements are streamlined by the District Rule 3.4 requirements.

The District Rule 3.4 PM emission limit for the urea transfer and shipping operation of P-72-78(a7) is 91.9 lbs (or 3.8 lbs/hour). The total combined daily throughput limit for this permit is 2,525 tons of urea (or 210,417 lbs/hour). The maximum allowable PM emission rate for an operation with an hourly process rate equal to or greater than 58,300 lbs is 40 lbs of PM. Since the hourly permitted PM limit of P-72-78(a7) is more stringent than the Rule 2.19 requirement, the rule requirements are streamlined by the District Rule 3.4 requirements.

The District Rule 3.4 PM emission limit for the ship and barge urea receiving operation of P-73-78(a3) is 633.6 lbs (or 26.4 lbs/hour). The total daily throughput limit for this permit is 14,400 tons of urea (or 1,200,000 lbs/hour). The maximum allowable PM emission rate for an operation with an hourly process rate equal to or greater than 58,300 lbs is 40 lbs of PM. Since the hourly permitted PM limit of P-73-78(a3) is more stringent than the Rule 2.19 requirement, the rule requirements are streamlined by the District Rule 3.4 requirements.

RULE 2.27 Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters

Rule Description

This rule limits the NO_x emissions from boilers, steam generators, and process heaters with a rated heat input of 5 MMBTU/hr or greater, that are used in industrial, institutional, and commercial applications.

Compliance Status

Only the natural gas fired boiler operating under P-36-82(a) is subject to the requirements of this rule. The natural gas fired ammonia backup heater operating under P-71-78(a) is exempt from the requirements of this rule under the "low-use" provisions of Section 115. The version of the rule used in this evaluation is the rule adopted on August 14, 1996, and is part of the California SIP.

Permit Conditions

Only natural gas shall be burned in the boiler. [District Rule 2.27, §301/C-00-107]

The emission concentrations shall not exceed the following:

- a. CO - 400 parts per million by volume (ppmv), dry, corrected to 3% O₂; and
- b. NO_x - 30 ppmv, dry, corrected to 3% O₂. [District Rule 2.27, §301/C-00-107]

The Permit Holder shall, through yearly testing or data collection devices, collect sufficient data to verify compliance with District Rule 2.27. Such measurements may include, but are not limited to, oxygen concentration, CO concentration, and stack-gas temperatures. [District Rule 2.27, §303.2]

The Permit Holder shall perform an annual source test in accordance with District Rule 2.27 Section 502 to demonstrate compliance with the CO and NO_x limitations, or shall perform an annual tune-up in accordance with District Rule 2.27 Section 600. [District Rule 2.27, §402.7/C-00-107]

The Permit Holder shall submit a source test report or tune-up test report at least every twelve (12) months. The test report shall include the operational parameters of all flue-gas NO_x reduction equipment that were established during the initial source test. [District Rule 2.27, §403]

Source testing shall be conducted using the following test methods:

- a. CO - EPA Method 10, or CARB Method 100;
- b. NO_x (as NO₂) - EPA Method 7E, or CARB Method 100;
- c. Stack Gas Oxygen - EPA Method 3 or 3A, or CARB Method 100; and
- d. Flow Rate - EPA Method 19, or CARB Methods 1-4. [District Rule 2.27, §502.1 and §502.2/C-00-107]

All emission determinations shall be made in the as-found operating condition, except that emission determinations shall include at a minimum at least one source test conducted at the maximum firing rate allowed by the District permit, and no compliance determination shall be established within two (2) hours after a continuous period in which fuel flow to the unit is zero, or shut off, for thirty minutes or longer. [District Rule 2.27, §402.2/C-00-107]

A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in million cubic feet) of natural gas combusted in the boiler. [District Rule 2.27, §501/C-00-107]

The Permit Holder shall monitor and record the cumulative annual natural gas fuel usage (in million cubic feet) from the totalizing meter, or by any other acceptable methods approved by the District. The records shall be updated weekly and made available to the District upon request. Historic annual data for the five (5) previous calendar years shall be kept and made available to the District upon request. [District Rule 2.27, §501]

RULE 2.32 Stationary Internal Combustion Engines

Rule Description

This rule limits the CO and NO_x emissions from stationary IC engines.

Compliance Status

The rule applies to the emergency diesel fired IC engine operating under P-85-94(t). Pursuant to Sections 110.2 and 110.3 of the rule, the emergency engine is exempt from the emission limit and the testing requirements of the rule, except for the recordkeeping requirements of Section 503. The version of the rule used in this evaluation is the rule adopted on November 10, 2001, and is part of the California SIP.

Streamlining Demonstration

The yearly operational exemption of Section 110.2 can be streamlined by a District Rule 3.4 condition. The streamlining demonstration for the condition is shown below:

Streamlined Requirement: Per the requirements of Section 110.2, “engines operated less than 200 hours per calendar year” are exempt from the requirements of the rule, except for Section 503.

The Permit Holder shall not operate the IC engine more than two hundred (200) hours per calendar year. [District Rule 3.4, § 110.2/P-85-94(t)]

Therefore, the Rule 2.32 requirement is streamlined by the District Rule 3.4 requirements of the engine.

Streamlining Demonstration

The exemption for maintenance operation of emergency engines of Section 110.3 can be streamlined by a District Rule 3.4 condition. The streamlining demonstration for the condition is shown below:

Streamlined Requirement: Per the requirements of Section 110.3, “emergency standby engines operated either during an emergency or maintenance operation(where) maintenance operation is limited to 50 hours per calendar year” are exempt from the requirements of the rule, except for Section 503.

The Permit Holder shall not operate the IC engine more than fifty (50) hours per calendar year for maintenance and testing purposes. [District Rule 3.4, § 110.3/P-85-94(t)]

Therefore, the Rule 2.32 requirement is streamlined by the District Rule 3.4 requirements of the engine.

Streamlining Demonstration

The emergency standby engine provisions of Section 202 can be streamlined by a District Rule 3.4 condition. The streamlining demonstration for the condition is shown below:

Streamlined Requirement: Per Section 202, an “emergency standby engine” is “an internal combustion engine used only as follows:

- a. When normal power line or natural gas service fails.
- b. For the emergency pumping of water for either fire protection or flood relief.

An emergency standby engine may not be operated to supplement a primary power source when the load capacity or rating of the primary power source has either been reached or exceeded.”

The Permit Holder’s operation of the IC engine for reasons other than maintenance purposes shall be limited to actual interruptions of electrical power by the serving utility. [District Rule 3.4, § 110.4/P-85-94(t)]

Therefore, the Rule 2.32 requirement is streamlined by the District Rule 3.4 requirements of the engine.

Streamlining Demonstration

The record retention requirement of Section 503 can be streamlined by the record retention requirements of District Rule 3.8. It should be noted that the recordkeeping requirements contained in P-85-94(t) are currently based on the CARB Airborne Toxics Control Measure for Stationary Compression Ignition Engines (effective October 18, 2007). Since this condition was included in the permit at the time of renewal and has not been included in an approved ATC, the condition is not federally enforceable and will not be placed in the Title V permit. The streamlining demonstration for the Section 503 requirement is shown below:

Streamlined Requirement: Section 503 requires that “an owner or operator claiming an exemption under Sections 110.2 or 110.3 of (the) rule shall maintain a log of operating hours for each engine. The log of operating hours shall be retained for two (2) years and be made available to the Air Pollution Control Officer upon request.”

The permit holder shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of sample collection, measurement, report, or application. [District Rule 3.8, §302.6(b)]

Therefore, the Rule 2.32 requirement is streamlined by the District Rule 3.8 requirements of the engine.

RULE 2.42 Nitric Acid Production

Rule Description

This rule established NO_x and visible emission limits for weak nitric acid production facilities.

Compliance Status

The rule was adopted on May 15, 2009, and on September 15, 2009, CARB submitted the SIP revisions to the U.S. EPA for approval. To date, the rule has not been incorporated into the SIP. Since the nitric acid plant’s current local permit has not yet been modified to incorporate requirements of the new rule, none of the rule’s conditions have become federally enforceable.

Permit Conditions

No permit conditions are required.

RULE 3.1 General Permit Requirements

Rule Description

This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of operating permits.

Compliance Status

The source is currently in compliance with the rule. The version of the rule used in this evaluation is the rule adopted on February 23, 1994, and is part of the California SIP.

Permit Conditions

No person shall build, erect, alter, or replace any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, without first obtaining an authorization to construct from the Air Pollution Control Officer (APCO) as specified in Section 401 of District Rule 3.1. [District Rule 3.1, §301.1]

No person shall operate any facility, article, machine, equipment, or other contrivance, for which an authorization to construct is required by District Rules and Regulations without first obtaining a written permit from the APCO. [District Rule 3.1, §302.1]

No person shall operate any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, without obtaining a permit from the APCO or the Hearing Board. [District Rule 3.1, §302.2]

The owner or operator of any facility, article, machine, equipment, or other contrivance for which a permit to operate is in effect shall notify the District office whenever a breakdown, malfunction, or operational upset condition exists which would tend to increase emissions of air pollutants or whenever any operating condition contrary to any provision of the permit to operate exists. Such notice shall be given to the District no later than four (4) hours after

occurrence during regular workday hours or no later than two (2) hours of the District workday following an occurrence not during regular District workday hours. The notice shall provide the District information as to causes and corrective action being taken, with a schedule for return to required operating conditions. [District Rule 3.1, §405.3]

Work Practice and Operational Requirements

Requirements for P-36-82(a) - Boiler

The Permit Holder shall install and maintain such facilities as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with CARB Test Method 1. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.1, §303.2/C-00-107]

Requirements for P-71-78(a) - Ammonia Backup Heater

The Permit Holder shall not operate this ammonia product heater more than 250 hours per calendar year total, including maintenance, testing, and backup usage. [District Rule 3.1, §402/C-01-169]

Monitoring and Testing Requirements

Requirements for P-36-82(a) - Boiler

The Permit Holder shall perform ongoing source tests triennially to demonstrate compliance with the CO and NO_x limitations when firing on natural gas. [District Rule 3.1, §402/C-00-107]

The District must be notified prior to any compliance source test, and a source test plan must be submitted for approval fourteen (14) days prior to testing. The results of the source test shall be submitted to the District within sixty (60) days of the test date. [District Rule 3.1, §402/C-00-107]

Requirements for P-37-82(a2) - Nitric Acid Plant

The Permit Holder shall perform a weekly visible emissions test using U.S. EPA Method 9. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within twenty four (24) hours the District shall be notified immediately. [District Rule 3.1, §402/C-03-68]

The Permit Holder shall install, calibrate, maintain, and operate a CEMS for measuring CO. [District Rule 3.1, §402/C-03-68]

The CEMS span shall be between 450 and 500 ppm of nitrogen oxide (NO). [District Rule 3.1, §402/C-03-68]

The calibration gas shall be NO. [District Rule 3.1, §402/C-03-68]

RULE 3.4 New Source Review

Rule Description

This rule applies to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which are subject to Rule 3.1 (General Permit Requirements) and which, after construction or modification, emit or may emit any affected pollutants. This rule shall not apply to prescribed burning of forest, agriculture or range land, road construction or any other non-point source common to timber harvesting or agricultural practices. The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets, by which authorities to construct such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.

Compliance Status

The source has satisfied the provisions of District Rule 3.4 (New Source Review). The New Source Review requirements were imposed on the most recent Authorities to Construct issued to the source.

Permit Conditions

Emission Limits for P-33-09(a) - Urea Receiving by Railcar and Truck

The PM₁₀ emissions from the railcar and overfilled truck urea receiving operating of P-33-09(a) shall not exceed 20.1 lb/day, 1,741 lb/1st calendar quarter, 1,760 lb/2nd calendar quarter, 1,780 lb/3rd calendar quarter, 1,780 lb/4th calendar quarter, and 2.42 tons/year. [District Rule 3.4/C-10-14]

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-618, particulate matter in excess of 0.004 grains per cubic feet of exhaust. [District Rule 3.4/C-10-14]

The Permit Holder shall not release or discharge into the atmosphere from scrubber F-644, particulate matter in excess of 0.004 grains per cubic feet of exhaust. [District Rule 3.4/C-10-14]

The Permit Holder shall not release or discharge into the atmosphere from scrubber GB-501 when receiving urea from railcars or overfilled trucks, particulate matter in excess of 0.0015 grains per cubic feet of exhaust. [District Rule 3.4/C-10-14]

Emission Limits for P-36-82(a) - Boiler

The VOC emissions from the boiler operating under P-36-82(a) shall not exceed 2.0 lb/day, 30 lb/1st calendar quarter, 31 lb/2nd calendar quarter, 31 lb/3rd calendar quarter, 31 lb/4th calendar quarter, and 0.06 tons/year. [District Rule 3.4/C-00-107]

The CO emissions from the boiler operating under P-36-82(a) shall not exceed 212.6 lb/day, 3,198 lb/1st calendar quarter, 3,228 lb/2nd calendar quarter, 3,259 lb/3rd calendar quarter, 3,259 lb/4th calendar quarter, and 6.47 tons/year. [District Rule 3.4/C-00-107]

The NO_x emissions from the boiler operating under P-36-82(a) shall not exceed 26.2 lb/day, 394 lb/1st calendar quarter, 398 lb/2nd calendar quarter, 402 lb/3rd calendar quarter, 402 lb/4th calendar quarter, and 0.80 tons/year. [District Rule 3.4/C-00-107]

The SO_x emissions from the boiler operating under P-36-82(a) shall not exceed 0.4 lb/day, 6 lb/1st calendar quarter, 7 lb/2nd calendar quarter, 7 lb/3rd calendar quarter, 7 lb/4th calendar quarter, and 0.01 tons/year. [District Rule 3.4/C-00-107]

The PM₁₀ emissions from the boiler operating under P-36-82(a) shall not exceed 9.9 lb/day, 148 lb/1st calendar quarter, 150 lb/2nd calendar quarter, 151 lb/3rd calendar quarter, 151 lb/4th calendar quarter, and 0.30 tons/year. [District Rule 3.4/C-00-107]

The emission concentrations shall not exceed the following:

- a. CO - 400 ppmv, dry, corrected to 3% O₂; and
- b. NO_x - 30 ppmv, dry, corrected to 3% O₂. [District Rule 3.4, §409.2/C-00-107]

Emission Limits for P-37-82(a2) - Nitric Acid Plant

The CO emissions from the nitric acid plant operating under P-37-82(a2) shall not exceed 1,000 lb/day, 90,000 lb/1st calendar quarter, 91,000 lb/2nd calendar quarter, 92,000 lb/3rd calendar quarter, 92,000 lb/4th calendar quarter, and 168.00 tons/year. [District Rule 3.4/C-03-68]

The NO_x emissions from the nitric acid plant operating under P-37-82(a2) shall not exceed 250.0 lb/day, 22,500 lb/1st calendar quarter, 22,750 lb/2nd calendar quarter, 23,000 lb/3rd calendar quarter, 23,000 lb/4th calendar quarter, and 42.00 tons/year. [District Rule 3.4/C-03-68]

Emission Limits for P-70-78(a1) - Bulk Ammonia Warehousing and Transfer

The VOC emissions from the ammonia warehousing and transfer equipment operating under P-70-78(a1) shall not exceed 0.1 lb/day, 6 lb/1st calendar quarter, 6 lb/2nd calendar quarter, 6 lb/3rd calendar quarter, 6 lb/4th calendar quarter, and 0.01 tons/year. [District Rule 3.4/C-06-181]

The CO emissions from the ammonia warehousing and transfer equipment operating under P-70-78(a1) shall not exceed 0.3 lb/day, 21 lb/1st calendar quarter, 21 lb/2nd calendar quarter, 21 lb/3rd calendar quarter, 21 lb/4th calendar quarter, and 0.04 tons/year. [District Rule 3.4/C-06-181]

The NO_x emissions from the ammonia warehousing and transfer equipment operating under P-70-78(a1) shall not exceed 1,397.4 lb/day, 7,193 lb/1st calendar quarter, 7,196 lb/2nd calendar quarter, 7,198 lb/3rd calendar quarter, 7,198 lb/4th calendar quarter, and 14.39 tons/year. [District Rule 3.4/C-06-181]

The SO_x emissions from the ammonia warehousing and transfer equipment operating under P-70-78(a1) shall not exceed 0.2 lb/day, 16 lb/1st calendar quarter, 16 lb/2nd calendar quarter, 16 lb/3rd calendar quarter, 16 lb/4th calendar quarter, and 0.03 tons/year. [District Rule 3.4/C-06-181]

The PM₁₀ emissions from the ammonia warehousing and transfer equipment operating under P-70-78(a1) shall not exceed 28.2 lb/day, 148 lb/1st calendar quarter, 148 lb/2nd calendar quarter, 148 lb/3rd calendar quarter, 148 lb/4th calendar quarter, and 0.30 tons/year. [District Rule 3.4/C-06-181]

Emission Limits for P-71-78(a) - Ammonia Backup Heater

The VOC emissions from the backup heater operating under P-71-78(a) shall not exceed 3.2 lb/day, 33 lb/1st calendar quarter, 33 lb/2nd calendar quarter, 33

lb/3rd calendar quarter, 33 lb/4th calendar quarter, and 0.02 tons/year. [District Rule 3.4/C-01-169]

The CO emissions from the backup heater operating under P-71-78(a) shall not exceed 48.4 lb/day, 504 lb/1st calendar quarter, 504 lb/2nd calendar quarter, 504 lb/3rd calendar quarter, 504 lb/4th calendar quarter, and 0.25 tons/year. [District Rule 3.4/C-01-169]

The NO_x emissions from the backup heater operating under P-71-78(a) shall not exceed 57.6 lb/day, 600 lb/1st calendar quarter, 600 lb/2nd calendar quarter, 600 lb/3rd calendar quarter, 600 lb/4th calendar quarter, and 0.30 tons/year. [District Rule 3.4/C-01-169]

The SO_x emissions from the backup heater operating under P-71-78(a) shall not exceed 0.3 lb/day, 4 lb/1st calendar quarter, 4 lb/2nd calendar quarter, 4 lb/3rd calendar quarter, 4 lb/4th calendar quarter, and negligible tons/year. [District Rule 3.4/C-01-169]

The PM₁₀ emissions from the backup heater operating under P-71-78(a) shall not exceed 4.4 lb/day, 46 lb/1st calendar quarter, 46 lb/2nd calendar quarter, 46 lb/3rd calendar quarter, 46 lb/4th calendar quarter, and 0.02 tons/year. [District Rule 3.4/C-01-169]

Emission Limits for P-72-78(a7) - Urea Shipping and Transfer

The PM₁₀ emissions from the urea shipping and transfer equipment operating under P-72-78(a7) shall not exceed 91.9 lb/day, 4,559 lb/1st calendar quarter, 4,562 lb/2nd calendar quarter, 4,565 lb/3rd calendar quarter, 4,565 lb/4th calendar quarter, and 2.72 tons/year. [District Rule 3.4/C-8-225]

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-618, particulate matter in excess of 0.001 grains per cubic feet of exhaust. [District Rule 3.4]

The Permit Holder shall not release or discharge into the atmosphere from scrubber F-644, particulate matter in excess of 0.001 grains per cubic feet of exhaust. [District Rule 3.4]

The Permit Holder shall not release or discharge into the atmosphere from scrubber GB-501 when transferring urea to the UAN-32 production process from the warehouse, particulate matter in excess of 0.012 grains per cubic feet of exhaust. [District Rule 3.4]

Emission Limits for P-73-78(a3) - Urea Receiving by Ship and Barge

The PM₁₀ emissions from the barge and ship receiving equipment operating under P-73-78(a3) shall not exceed 633.6 lb/day, 5,232 lb/1st calendar quarter, 5,232 lb/2nd calendar quarter, 5,232 lb/3rd calendar quarter, 5,232 lb/4th calendar quarter, and 2.62 tons/year. [District Rule 3.4/C-07-224]

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-558, particulate matter in excess of 0.070 grains per cubic feet of exhaust. [District Rule 3.4/C-07-224]

The Permit Holder shall not release or discharge into the atmosphere from baghouse P-593, particulate matter in excess of 0.006 grains per cubic feet of exhaust. [District Rule 3.4/C-07-224]

Emission Limits for P-85-94(t) - Emergency Diesel fired IC Engine

The VOC emissions from the emergency engine operating under P-85-94(t) shall not exceed 28.5 lb/day, 238 lb/1st calendar quarter, 238 lb/2nd calendar quarter, 238 lb/3rd calendar quarter, 238 lb/4th calendar quarter, and 0.12 tons/year. [District Rule 3.4/P-85-94]

The CO emissions from the emergency engine operating under P-85-94(t) shall not exceed 65.4 lb/day, 545 lb/1st calendar quarter, 545 lb/2nd calendar quarter, 545 lb/3rd calendar quarter, 545 lb/4th calendar quarter, and 0.27 tons/year. [District Rule 3.4/P-85-94]

The NO_x emissions from the emergency engine operating under P-85-94(t) shall not exceed 300.5 lb/day, 2,504 lb/1st calendar quarter, 2,504 lb/2nd calendar quarter, 2,504 lb/3rd calendar quarter, 2,504 lb/4th calendar quarter, and 1.25 tons/year. [District Rule 3.4/P-85-94]

The SO_x emissions from the emergency engine operating under P-85-94(t) shall not exceed 4.5 lb/day, 38 lb/1st calendar quarter, 38 lb/2nd calendar quarter, 38 lb/3rd calendar quarter, 38 lb/4th calendar quarter, and 0.02 tons/year. [District Rule 3.4/P-85-94]

The PM₁₀ emissions from the emergency engine operating under P-85-94(t) shall not exceed 20.6 lb/day, 172 lb/1st calendar quarter, 172 lb/2nd calendar quarter, 172 lb/3rd calendar quarter, 172 lb/4th calendar quarter, and 0.09 tons/year. [District Rule 3.4/P-85-94]

Work Practice and Operational Requirements

Process Limits for P-33-09(a) - Urea Receiving by Railcar and Truck

The amount of urea received by railcars under P-33-09(a) shall not exceed 1,200 tons/day, 108,000 tons/1st calendar quarter, 109,200 tons/2nd calendar quarter, 110,400 tons/3rd calendar quarter, 110,400 tons/4th calendar quarter, and 300,000 tons/year. [District Rule 3.4/ C-10-14]

The amount of urea off-loaded from overfilled trucks under P-33-09(a) shall not exceed 4.0 tons/day, 12.0 tons/1st calendar quarter, 12.0 tons/2nd calendar quarter, 12.0 tons/3rd calendar quarter, 12.0 tons/4th calendar quarter, and 48.0 tons/year. [District Rule 3.4/ C-10-14]

Process Limits for P-36-82(a) - Boiler

The amount of natural gas combusted by the boiler under P-36-82(a) shall not exceed 0.72 million cubic feet/day, 10.83 million cubic feet/1st calendar quarter, 10.93 million cubic feet/2nd calendar quarter, 11.04 million cubic feet/3rd calendar quarter, 11.04 million cubic feet/4th calendar quarter, and 43.84 million cubic feet/year. [District Rule 3.4/ C-00-107]

Process Limits for P-70-78(a1) - Bulk Ammonia Warehousing and Transfer

The amount of ammonia transferred to the storage tanks under P-70-78(a1) shall not exceed 28,000 tons/day, 200,000 tons/1st calendar quarter, 200,000 tons/2nd calendar quarter, 200,000 tons/3rd calendar quarter, 200,000 tons/4th calendar quarter, and 200,000 tons/year. [District Rule 3.4/ C-06-181]

The amount of ammonia continuously sent to the flare under P-70-78(a1) shall not exceed 0.067 tons/day, 6.026 tons/1st calendar quarter, 6.093 tons/2nd calendar quarter, 6.160 tons/3rd calendar quarter, 6.160 tons/4th calendar quarter, and 24.44 tons/year. [District Rule 3.4/ C-06-181]

The amount of ammonia vented to the flare of P-70-78(a1) during a planned maintenance or an upset event shall not exceed 72.0 tons/day, 360.0 tons/1st calendar quarter, 360.0 tons/2nd calendar quarter, 360.0 tons/3rd calendar quarter, 360.0 tons/4th calendar quarter, and 1,440.0 tons/year. [District Rule 3.4/ C-06-181]

The amount of natural gas combusted by the flare under P-70-78(a1) shall not exceed 0.012 million cubic feet/day, 1.080 million cubic feet/1st calendar quarter, 1.092 million cubic feet/2nd calendar quarter, 1.104 million cubic

feet/3rd calendar quarter, 1.104 million cubic feet/4th calendar quarter, and 4.38 million cubic feet/year. [District Rule 3.4/ C-06-181]

The amount of propane combusted by the flare under P-70-78(a1) shall not exceed 0.006 million cubic feet/day, 0.040 million cubic feet/1st calendar quarter, 0.040 million cubic feet/2nd calendar quarter, 0.040 million cubic feet/3rd calendar quarter, 0.040 million cubic feet/4th calendar quarter, and 0.159 million cubic feet/year. [District Rule 3.4/ C-06-181]

Process Limits for P-71-78(a) - Ammonia Backup Heater

The amount of natural gas combusted by the ammonia backup heater under P-71-78(a) shall not exceed 0.58 million cubic feet/day, 6.00 million cubic feet/1st calendar quarter, 6.00 million cubic feet/2nd calendar quarter, 6.00 million cubic feet/3rd calendar quarter, 6.00 million cubic feet/4th calendar quarter, and 6.00 million cubic feet/year. [District Rule 3.4/ C-01-169]

Process Limits for P-72-78(a7) - Urea Shipping and Transfer

The amount of urea shipped to truck or railcars under P-72-78(a7) shall not exceed 2,100 tons/day, 220,000 tons/1st calendar quarter, 220,000 tons/2nd calendar quarter, 220,000 tons/3rd calendar quarter, 220,000 tons/4th calendar quarter, and 220,000 tons/year. [District Rule 3.4/ C-08-225]

The amount of urea transferred to the UAN-32 production plant under P-72-78(a7) shall not exceed 300 tons/day, 27,000 tons/1st calendar quarter, 27,300 tons/2nd calendar quarter, 27,600 tons/3rd calendar quarter, 27,600 tons/4th calendar quarter, and 109,500 tons/year. [District Rule 3.4/ C-08-225]

The amount of urea-offloaded from overfilled railcars or trucks under P-72-78(a7) shall not exceed 125 tons/day, 500 tons/1st calendar quarter, 500 tons/2nd calendar quarter, 500 tons/3rd calendar quarter, 500 tons/4th calendar quarter, and 500 tons/year. [District Rule 3.4/ C-08-225]

Process Limits for P-73-78(a3) - Urea Receiving by Ship and Barge

The total amount of bulk urea received by ship or barge under P-73-78(a3) shall not exceed 14,400 tons/day, 300,000 tons/1st calendar quarter, 300,000 tons/2nd calendar quarter, 300,000 tons/3rd calendar quarter, 300,000 tons/4th calendar quarter, and 300,000 tons/year. [District Rule 3.4/ C-07-224]

The amount of material transferred from ships (defined as transferring material to dock side hopper via "clam shell") shall not exceed 3,600 tons per day and 25,200 tons per year. [District Rule 3.4/C-07-224]

Process Limits for P-85-94(t) - Emergency Diesel fired IC Engine

The amount of diesel fuel combusted by the IC engine under P-85-94(t) shall not exceed 640.8 gallons/day, 5,340 gallons/1st calendar quarter, 5,340 gallons/2nd calendar quarter, 5,340 gallons/3rd calendar quarter, 5,340 gallons/4th calendar quarter, and 5,340 gallons/year. [District Rule 3.4/ P-85-94]

Requirements for P-33-09(a) - Urea Receiving by Railcar and Truck

The Permit Holder shall maintain all control equipment, including ducts and filters, in good operating condition and shall be operated at all times in conjunction with its associated process. [District Rule 3.4/C-10-14]

When transferring urea from railcars to the UAN-32 production process, the Permit Holder shall be required to utilize a dust pan beneath the railcar which is served by the AAF scrubber (GB-501), as well as, fully enclosed the truck receiving pit opening. [District Rule 3.4]

Opacity Requirements for P-33-09(a) - Urea Receiving by Railcar and Truck

The Permit Holder shall not discharge into the atmosphere from the baghouse exhaust, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart; or
- b. Greater than 5% opacity. [District Rule 3.4/C-10-14]

The Permit Holder shall not discharge into the atmosphere from either of the scrubbers exhausts, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.4]

The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.4/C-10-14]

Requirements for P-36-82(a) - Boiler

The control equipment associated with the approved process shall be operated at all times when permitted equipment is in operation. [District Rule 3.4/C-00-107]

Requirements for P-70-78(a1) - Bulk Ammonia Warehousing and Transfer

The Permit Holder shall operate at least one (1) train of compressors, or the flare, or both control devices, at all times when the permitted equipment is in operation. [District Rule 3.4/C-06-181]

A non-resettable, totalizing fuel flow meter shall be installed and utilized to measure the quantity (in cubic feet) of natural gas and propane combusted in the flare. [District Rule 3.4/C-06-181]

Requirements for P-72-78(a7) - Urea Shipping and Transfer

The Permit Holder shall maintain all control equipment, including ducts and filters, in good operating condition and shall be operated at all times in conjunction with its associated process. [District Rule 3.4/C-08-225]

The number and types of equipment at this plant shall match the equipment listed in the "Equipment Inventory" section of PTO P-72-78(a7). The Permit Holder shall maintain a complete list of all equipment at the plant, which includes a description and horsepower of each piece of equipment. This list shall be kept with the permit to operate and shall be made available to the District upon request. [District Rule 3.4/C-08-225]

Opacity Requirements for P-72-78(a7) - Urea Shipping and Transfer

The Permit Holder shall not discharge into the atmosphere from the baghouse exhaust, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart; or
- b. Greater than 5% opacity. [District Rule 3.4/C-08-225]

The Permit Holder shall not discharge into the atmosphere from either of the scrubbers exhausts, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
- b. Greater than 20% opacity. [District Rule 3.4/C-08-225]

Requirements for P-73-78(a3) - Urea Receiving by Ship and Barge

The Permit Holder shall maintain all control equipment, including ducts and filters, in good operating condition and shall be operated at all times when material is being transferred to the dock side hopper. [District Rule 3.4/C-07-224]

Opacity Requirements for P-73-78(a3) - Urea Receiving by Ship and Barge

While unloading barges (defined as transferring material to dock side via conveyor and chute) the Permit Holder shall not discharge into the atmosphere any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/2 on the Ringelmann Chart; or
- b. Greater than 10% opacity. [District Rule 3.4/C-07-224]

The Permit Holder shall not discharge into the atmosphere, from any baghouse, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart; or
- b. Greater than 5% opacity. [District Rule 3.4/C-07-224]

Requirements for P-85-94(t) - Emergency Diesel fired IC Engine

The Permit Holder shall not operate the IC engine more than two hundred (200) hours per calendar year. [District Rule 3.4, §110.2/P-85-94(t)]

The Permit Holder shall not operate the IC engine for the supplying of power to a serving utility for distribution on the grid. [District Rule 3.4, §110.3/P-85-94(t)]

The Permit Holder's operation of the IC engine for reasons other than maintenance purposes shall be limited to actual interruptions of electrical power by the serving utility. [District Rule 3.4, §110.4/ P-85-94(t)]

Monitoring and Testing Requirements

Requirements for P-37-82(a2) - Nitric Acid Plant

The Permit Holder shall conduct a Relative Accuracy Test Audit (RATA) at least once every four (4) calendar quarters per 40 CFR, Appendix B, Performance Specification 2, or equivalent. [District Rule 3.4/C-03-68]

Recordkeeping Requirements

Requirements for P-33-09(a) - Urea Receiving by Railcar and Truck

The Permit Holder shall maintain daily, quarterly, and yearly records of the total amount (in tons) of urea:

- a. Received by railcar and transferred to the UAN-32 process; and
- b. Received by railcar and transferred to the main storage warehouse.
- c. Off-loaded from overfilled trucks and transferred to the UAN-32 process; and
- d. Off-loaded from overfilled trucks and transferred to the main storage warehouse. [District Rule 3.4/C-10-14]

These records shall be retained for a minimum of five (5) years and shall be made available to District personnel upon request. [District Rule 3.4/C-10-14]

Requirements for P-37-82(a2) - Nitric Acid Plant

The Permit Holder shall submit a monthly CO and NO_x emission report to the District within fifteen (15) days of the end of the month. The report shall provide average daily CO and NO_x concentrations (ppm), daily CO and NO_x emissions in units of the District standard (lbs/day), and aggregate CO and NO_x emissions in tons. [District Rule 3.4/C-03-68]

Requirements for P-70-78(a1) - Bulk Ammonia Warehousing and Transfer

The Permit Holder shall on a quarterly basis maintain and record the individual quantities of continuous and maintenance/upset ammonia vapors combusted in the flare. The individual quantities may be measured or calculated. [District Rule 3.4/C-08-161]

The Permit Holder shall on a quarterly basis maintain and record the individual quantities of natural gas and propane combusted in the flare. [District Rule 3.4/C-06-181]

All records shall be maintained for a period of five (5) years and shall be made readily available to the Air Pollution Control Officer upon request. [District Rule 3.4/C-06-181]

Requirements for P-71-78(a) - Ammonia Backup Heater

The Permit Holder shall maintain a log of the operating hours identifying the duration and date of each usage. The log shall be retained for a period of five

(5) years and be made available to District personnel upon request. [District Rule 3.4, §501/C-01-169]

Requirements for P-72-78(a7) - Urea Shipping and Transfer

The Permit Holder shall maintain daily records of the total amount of urea (in tons) transferred for UAN-32 production process from:

- a. The warehouse;
- b. The total amount of urea loaded out of the warehouse to trucks and railcars, and
- c. The total amount of urea off-loaded back to the warehouse from over-filled trucks and railcars.

These records shall be retained for a minimum of five (5) years and shall be made available to District personnel upon request. [District Rule 3.4/C-08-225]

Requirements for P-73-78(a3) - Urea Receiving by Ship and Barge

The Permit Holder shall maintain daily records of the amount of urea received (in tons) and by which method it was received (by barge or by clam shell from ships). These records shall be retained for a minimum of five (5) years and shall be made available to District personnel upon request. [District Rule 3.4/C-07-224]

RULE 3.8 Federal Operating Permits

Rule Description

This Rule implements the requirements of Title V of the Federal Clean Air Act as amended in 1990 (CAA) for permits to operate. Title V provides for the establishment of operating permit programs for sources which emit regulated air pollutants, including attainment and non-attainment pollutants.

Compliance Status

The source is in compliance with the requirements of this rule. The source was issued an initial Title V operating permit on May 29, 2003. As previously discussed, this Title V permit renewal will also incorporate changes that have been approved in ATC C-10-14. This ATC proposes the modification of existing urea conveying and transferring process under P-33-09 to allow for material transfer into the facility's main urea storage warehouse. Per the source's request, ATC C-10-14 was not processed under the Enhanced NSR provisions of District Rule 3.8. Therefore, the source will be submitting a separate Title V permit application that requests that the renewed Title V permit include the

revisions authorized in ATC C-10-14. As previously discussed in the Section II of this Statement of Basis (Proposed Revisions), the District will require that the facility construct the new equipment and implement the ATC into a PTO prior to final issuance of F-00470-8.

Permit Conditions

Right of Entry:

The permit shall require that the source allow the entry of the District, California Air Resource Board (CARB), or U.S. EPA officials for the purpose of inspection and sampling, including:

- a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
- b. Inspection and duplication of records required by the permit to operate; and
- c. Source sampling or other monitoring activities. [District Rule 3.8, §302.10]

Compliance with Permit Conditions:

The Permit Holder shall comply with all Title V permit conditions. [District Rule 3.8, §302.11(a)]

The permit does not convey property rights or exclusive privilege of any sort. [District Rule 3.8, §302.11(b)]

Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [District Rule 3.8, §302.11(c)]

The Permit Holder shall not use the “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition. [District Rule 3.8, §302.11(d)]

A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [District Rule 3.8, §302.11(e)]

Within a reasonable time period, the Permit Holder shall furnish any information requested by the Air Pollution Control Officer (APCO), in writing, for the purpose of determining:

- a. Compliance with the permit; or

- b. Whether or not cause exists for a permit or enforcement action. [District Rule 3.8, §302.11(f)]

Emergency Provisions:

Within two (2) weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:

- a. An emergency occurred;
- b. The Permit Holder can identify the cause(s) of the emergency;
- c. The facility was being properly operated at the time of the emergency;
- d. All steps were taken to minimize the emissions resulting from the emergency; and
- e. Within two (2) working days of the emergency event, the Permit Holder provided the District with a description of the emergency and any mitigating or corrective actions taken; and

In any enforcement proceeding, the Permit Holder has the burden of proof for establishing that an emergency occurred. [District Rule 3.8, §302.12]

Severability:

If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of these conditions. [District Rule 3.8, §302.13]

Compliance Certification:

The responsible official shall submit a compliance certification to the U.S. EPA and the APCO every 12 months unless required more frequently by an applicable requirement. [District Rule 3.8, §302.14(a)]

The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of Rule 3.8. [District Rule 3.8, §302.14(b)]

The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [District Rule 3.8, §302.14(c)]

The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [District Rule 3.8, §302.14(d)]

Permit Life:

The Title V permit shall expire five (5) years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [District Rule 3.8, §302.15]

Payment of Fees:

An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [District Rule 3.8, §302.16]

Permit Revision Exemption:

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit. [District Rule 3.8, §302.22]

Application Requirements:

An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than eighteen (18) months and no later than six (6) months before the expiration date of the current permit to operate. [District Rule 3.8, §402.2]

An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [District Rule 3.8, §402.3]

An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor

permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:

- a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
- b. Proposed permit terms and conditions; and
- c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [District Rule 3.8, §402.4]

Permit Reopening for Cause:

Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:

- a. The need to correct a material mistake or inaccurate statement;
- b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;
- c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is three (3) years or greater, no later than eighteen (18) months after the promulgation of such requirement (where less than three (3) years remain in the authorized life of the permit, the APCO shall incorporate the requirements into the permit to operate upon renewal); or
- d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [District Rule 3.8, §413.1]

Recordkeeping:

The Permit Holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:

- a. Date, place, and time of sampling;
- b. Operating conditions at the time of sampling;
- c. Date, place, and method of analysis; and
- d. Results of the analysis. [District Rule 3.8, §302.6(a)]

The permit holder shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of sample collection, measurement, report, or application. [District Rule 3.8, §302.6(b)]

Reporting Requirements:

Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than ten (10) days after detection.[District Rule 3.8, §302.7(a)]

A monitoring report shall be submitted at least every six (6) months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7. a of Rule 3.8. [District Rule 3.8, §302.7(b)]

All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [District Rule 3.8, §302.7(c)]

Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [District Rule 3.8, §302.7(e)]

40 CFR Part 60, Subpart A General Provisions

Rule Description

This subpart provides general monitoring, recordkeeping, performance, and compliance requirements for sources that are subject to New Source Performance Standards (NSPS).

Compliance Status

This subpart is applicable to the nitric acid plant operating under P-37-82(a2). The source is currently in compliance with this subpart.

Permit Conditions

The Permit Holder shall submit a quarterly excess emissions and monitoring system performance report and/or a summary report form to the District and U.S. EPA, Region IX within thirty (30) days of the end of each quarter. [40 CFR Part 60, Section 60.7(a)(7)(c) (Subpart A)/C-03-68]

The Permit Holder shall submit a summary report and excess emissions and monitoring report if the total duration of excess emissions for the reporting period is 1% or greater of the total operating time for the reporting period, or

if the total CEMS downtime for the reporting period is 5% or greater of the total operating time for the reporting period. [40 CFR Part 60, Section 60.7(d)(2) (Subpart A)/C-03-68]

The Permit Holder shall maintain records of the occurrence and duration of any:

- a. Startup, shutdown, or malfunction in the operation of an affected facility;
- b. Any malfunction of the air pollution control equipment; or
- c. Any periods during which a continuous emission monitoring system (CEMS) or monitoring device is inoperative. [40 CFR Part 60, Section 60.7(b) (Subpart A)/C-03-68]

The Permit Holder shall maintain a file of all measurements, maintenance reports, and records in a permanent form suitable for inspection. The file shall be retained for at least two (2) years. [40 CFR Part 60, Section 60.7(f) (Subpart A)/C-03-68]

The CEMS shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments. [40 CFR Part 60, Section 60.13(e) (Appendix A)/C-03-68]

The Permit Holder shall check the zero and span calibration drifts at least once daily (24 hour) in accordance with a written procedure. [40 CFR Part 60, Section 60.13 (Subpart A)/C-03-68]

The zero and span shall be adjusted whenever the daily zero drift or the daily span drift deviates from the reference value of the calibration gas by more than two-times 2.5% of the span value. [40 CFR Part 60, Section 60.13(d)(1) (Subpart A)/C-03-68]

The CEMS shall complete a minimum of one (1) cycle of operation (sampling, analyzing, and data recording) for each successive fifteen (15) minute period. [40 CFR Part 60, Section 60.13(e)(2) (Subpart A)/C-03-68]

One (1) hour averages shall be computed from four (4) or more data points equally spaced over each one (1) hour period. [40 CFR Part 60, Section 60.13(h) (Subpart A)/C-03-68]

The data accumulated during periods of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, shall not be included in the data average. [40 CFR Part 60, Section 60.13(h) (Subpart A)/C-03-68]

40 CFR Part 60, Subpart D **Standards of Performance for Fossil-Fuel Fired Steam Generators**

Rule Description

This subpart contains emission guidelines and monitoring requirements for fossil fuel fired steam generators.

Compliance Status

This subpart is applicable to fossil fuel fired steam generators over 250 MMBTU/hour. This subpart is not applicable to any units at the source.

Permit Conditions

No permit conditions are required.

40 CFR Part 60, Subpart Da **Standards of Performance for Electric Utility Steam Generating Units**

Rule Description

This subpart contains emission guidelines and monitoring requirements for electric utility steam generating units.

Compliance Status

This subpart is applicable to electric utility steam generators with ratings over 250 MMBTU/hour. This subpart is not applicable to any units at the source.

Permit Conditions

No permit conditions are required.

40 CFR Part 60, Subpart Db **Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units**

Rule Description

This subpart contains emission guidelines and monitoring requirements for industrial, commercial, and institutional steam generating units.

Compliance Status

This subpart is applicable to industrial, commercial, and institutional steam generators with maximum ratings over 100 MMBTU/hour. This subpart is not applicable to any units at the source.

Permit Conditions

No permit conditions are required.

40 CFR Part 60, Subpart Dc Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units

Rule Description

This subpart contains emission guidelines and monitoring requirements for small industrial, commercial, and institutional steam generating units.

Compliance Status

This subpart is applicable to industrial, commercial, and institutional steam generators with maximum ratings between 10 MMBTU/hour and 100 MMBTU/hour for which construction, modification, or reconstruction is commenced after June 9, 1989. Although the boiler of P-36-82(a) was initially constructed in 1982, it was later retrofitted in 2000 to add a flue gas re-circulation system and an automatic air-to-fuel ratio controller. Since the installation of the control equipment does not result in an increase in any single air pollutant, it does not satisfy the definition of "modification" contained in Section 60.2 of the subpart. Therefore, the boiler is not subject to the provisions of this subpart.

Permit Conditions

No permit conditions are required.

40 CFR Part 60, Subpart G Standards of Performance for Nitric Acid Plants

This subpart contains emission guidelines and monitoring requirements for control of NO_x from nitric acid plants.

Compliance Status

This subpart is applicable to any facility that commences construction or modification after August 17, 1971, and therefore applies to the nitric acid plant operating under P-37-82(a2). The source is currently in compliance with this subpart.

Permit Conditions

The nitric acid plant shall be operated in accordance with the requirements of 40 CFR Part 60, Subpart G - Standards of Performance for Nitric Acid Plants. [40 CFR Part 60, Section 60.70(b) (Subpart G)/C-03-68]

Nitrogen oxides (expressed as NO₂) emissions shall not exceed 3.0 lbs per ton of nitric acid produced (expressed as 100% nitric acid). [40 CFR Part 60, Section 60.72(a)(1) (Subpart G)/C-03-68]

Process emissions shall not exceed 10% opacity. [40 CFR Part 60, Section 60.72(a)(2) (Subpart G)/C-03-68]

The Permit Holder shall install, calibrate, maintain, and operate a CEMS for measuring NO_x. [40 CFR Part 60, Section 60.73(a) (Subpart G)/C-03-68]

Streamlining Demonstration

The following calibration gas specific requirement of 40 CFR, Section 60.73(a) has been streamlined by a District Rule 3.1 specific condition since the use of an alternative span gas is necessary. Agrium has received EPA approval to use a NO span gas as part of the CEMS last modification under ATC C-03-68. Since the NSPS specifically requires NO₂ as the system's span gas, the facility petitioned U.S. EPA for an alternate method (documented in an Agrium letter to EPA dated May 10, 2004). After several conversations with Steve Frye, EPA Region IX office, on April 11, 2005, Agrium received verbal approval for use of their proposed alternate method. The streamlining demonstrations for the condition are shown below:

Streamlined Requirement: "The calibration gas shall be Nitrogen Dioxide (NO₂)."

The calibration gas shall be nitric oxide (NO). [District Rule 3.1, §402/C-03-68]

The 40 CFR requirement is streamlined by the District Rule 3.1 requirements of P-37-82(a2).

The Permit Holder shall establish a conversion factor for the purpose of converting CO and NO_x monitoring data into units of the applicable standard. [40 CFR Part 60, Section 60.73(b) (Subpart G)/C-03-68]

The Permit Holder shall record the daily production rate and hours of operation. [40 CFR Part 60, Section 60.73(b) (Subpart G)/C-03-68]

The Permit Holder shall use U.S. EPA Method 7 as defined in 40 CFR Part 60, or methodologies deemed equivalent in writing by the District, for continuous monitoring system performance evaluation. If the source wishes to use an equivalent methodology a complete and detailed description of the method must be submitted to the District for written approval no less than 30 days prior to the performance evaluation. [40 CFR Part 60, Section 60.74(a) (Subpart G)/C-03-68]

40 CFR Part 60, Appendix B Performance Specification 2

Rule Description

This appendix details performance specifications for CEMS units that are required by applicable Subparts of 40 CFR 60.

Compliance Status

This appendix is applicable to the CEMS unit on the nitric acid plant on P-37-82(t). The source is currently in compliance with this appendix.

Permit Conditions

The CEMS (recorder output) shall have a high-level value between 1.5 times the NO_x concentration corresponding to the emission standard level and the span value. [40 CFR Part 60, Section 4.1 (Appendix B, Performance Specification 2)/C-03-68]

The calibration gas shall have a reference value between 50% and 100% of the high-level value. [40 CFR Part 60, Section 4.1 (Appendix B, Performance Specification 2)/C-03-68]

40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition IC Engines

Rule Description

This subpart establishes emission limitations for manufacturers, owners, and operators of stationary compression ignition IC engines.

Compliance Status

This subpart applies to all engines that commenced operation (purchased for use) after July 11, 2005. Because the emergency IC engine operating under P-85-94(t) was installed in 1978, it is not subject to the requirements of the subpart.

Permit Condition

No permit conditions are required.

40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating IC Engines

Rule Description

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

Compliance Status

This subpart applies to all engines that: (a) have maximum horsepower rating at or above 500 BHP; and (b) operate at a major source of hazardous air pollutants (HAPs). Because the emergency IC engine operating under P-85-94(t) does not emit more than 10 tons of a single HAP, or 25 tons of any combination of HAPs, and is not located at a major source of HAPs, the not is not subject to the requirements of this subpart.

Permit Condition

No permit conditions are required.

40 CFR Part 63, Subpart DDDDD **NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters**

Rule Description

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

Compliance Status

This subpart applies to all new, reconstructed, or existing industrial, commercial, and institutional boilers and process heaters operating at a major source of HAPs. Because the natural gas fired boiler under P-86-82(a) and the ammonia backup heater under P-71-78(a) are not located at major source of HAPs, the unit is not subject to the requirements of this subpart.

Permit Condition

No permit conditions are required.

40 CFR Part 64 **Compliance Assurance Monitoring**

Rule Description

This subpart provides guidelines for developing a compliance assurance monitoring (CAM) plan. The CAM plan requires that a facility monitor the appropriate parameters of a process or its control equipment, and/or measure the process' actual emissions, so as to ensure emission compliance on an ongoing basis.

Compliance Status

CAM requirements are pollutant specific and apply to any pollutant emissions unit at a major source that is required to obtain a Part 70, State Operating Permit Programs, permit which satisfies all of the following:

- a. The unit is subject to an emission limit or standard for an applicable regulated air pollutant;
- b. The unit uses a control device to achieve compliance with any such emission limitation or standard; and

- c. The unit's pre-control device PTE of an applicable regulated pollutant is greater than or equal to that pollutant's major source threshold.

The emergency IC engine under P-85-94(t), the natural gas fired boiler under P-36-82(a) and the ammonia backup heater under P-71-78(a) are not subject to CAM requirements since the individual emission units do not use control devices to achieve compliance with any emission limitation or standard.

The urea receiving equipment operating under P-33-09(a) and P-73-78(a3), the urea shipping and transfer equipment under P-72-78(a7), and the bulk ammonia warehousing and transfer equipment under P-70-78(a1) are not subject to CAM requirements since their individual pre-control device PTE's are not greater than or equal to the major source threshold for any one pollutant.

Because the CAM plan requirements are pollutant specific, a separate evaluation will be conducted for the CO and NO_x emissions from the nitric acid plant under P-37-82(a2).

Specifically for the CO emissions, the nitric acid plant:

- a. Is subject to CO specific emission limits of PTO P-37-82(a2);
 - b. Is not equipped with a CO specific control device; and
 - c. Has a PTE greater than the major source threshold of 100 tons per year.
- Since the nitric acid plant is not equipped with a CO specific control device, the three CAM applicability requirements can not be met and the nitric acid plant is not subject to the CAM requirements.

Specifically for the NO_x emissions, the nitric acid plant:

- a. Is subject to the NO_x specific emission limits and the continuous compliance determination methods of Subpart G and PTO P-37-82(a2);
- b. Is equipped with an integrated control device consisting of a non-selective catalytic reduction system (NSCR) which is used to both comply with the emission standards of Subpart G and produce nitric acid.
- c. Has a NO_x specific pre-control device PTE between 792 tons and 4,666 tons per year. The PTE's range has been calculated using a NSCR control efficiency range of 94.7% to 99.1%, as listed in U.S. EPA's "Alternative Control Techniques Document - Nitric and Adipic Acid Manufacturing Plants" (Pg. 5-17, December 1991).

Although the nitric acid plant satisfies all three CAM requirements, it is exempted from the requirements of the rule per the provisions of Section 64.2(b)(iv). The section requires that any emissions unit complying with a continuous compliance determination method be exempted from the requirements of the subpart. Therefore, by satisfying with the CEMS

requirements of Subpart G, the nitric acid plant is exempted from the CAM requirements of this subpart.

Permit Conditions

No permit conditions are required.